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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
097367,642	08/19/99	YASUKOHCHI	T 055303

IM52/0712
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WASHINGTON DC 20037

EXAMINER

BUTTNER, D

ART UNIT	PAPER NUMBER
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1712

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DATE MAILED: 07/12/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/367,642

Applicant(s)
YASUKOHCHI

Examiner
BUTTNER

Art Unit
1712



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 16, 2001
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

Art Unit: 1712

Claims 7 and 11-15 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. A proper dependent claim must include all the limitations of the parent claim. These claims attempt to depend on only a part (i.e. the purity) of earlier claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7 and 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims do not identify formula (I).

Claims 12 and 13 attempt to broaden the scope of "R" beyond what is allowed for by the parent claim. What is "R"?

Claims 1-6 and 8-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Kemp '016 Patent.

Kemp alkoxylates compounds having an active hydrogen. The active hydrogen compound can be methyl phenol (col. 4, line 33) or a C₁-C₁₀ alkanol (col. 4, line 42). The adduct number can be 30 or greater (col. 8, line 21).

Art Unit: 1712

Kemp teaches that the water content of the reactants should be kept low (col. 7, line 46-53), because water changes the alkylene oxide adduct distribution of the product. This appears to be the crux of applicant's invention (page 18, line 22).

Kemp's procedure results in a low content of polyalkylene glycol and other by-products (col. 9, line 58). Additional purification steps (col. 9, line 65) can be performed. Kemp does not quantify his MW distribution and purity through chromatography, but inherently would meet the claims since the same technique (low water content) is used.

It would also have been obvious to reduce the water content as low as possible to achieve the purest alkoxyated compound possible.

Claims 1-4, 7, 8 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Martinez or JO 8165343 Patents.

Martinez discloses methoxy PEG (col. 9, line 9) of applicant's MW. Martinez carboxylates this material in later examples. A high purity is obtained (claim 23). This carboxylated material can be then aminated (col. 5, line 54).

JO 8165343 also shows methoxy PEG (examples 1, 3,5-7) of applicant's MW. The material is later aminated. High purity (abstract) and narrow MW distribution (see graphs) result.

Me^c purity of an old product does not render the product unobvious. (MPEP 2144.04 (VII)). This especially holds in the current situation where the prior art recognizes purity as important and references such as Kemp (col. 9, line 65) and those of applicant's background (page 3) teach various methods for removing impurities.

Art Unit: 1712

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Martinez or JO 8165343 Patents in combination with Kemp.

Martinez and J '343 do not suggest keeping water content low when producing their methoxy PEG.

Kemp teaches water affects the alkylene oxide adduct distribution. It would have been obvious to produce the methoxy PEG in the absence of water to keep the MW distribution narrow.

Applicant's arguments filed on 4/16/01 have been fully considered but they are not persuasive. Applicant argues Kemp does not refer to impurities (B) to (D).

Kemp teaches it is important to keep water content low during reaction for a uniform product. Coincidentally, removal of water is the only technique reported in applicant's examples to ensure purity.

It would have been obvious to reduce the water in Kemp's process as far as possible to achieve a high purity product. If Kemp reduced his water content to 5ppm, wouldn't impurities (B), (C) and (D) also be avoided?

Applicant argues the application shows control of water content alone does not result in the required purity. The only support applicant points to is the discussion of catalysts at page 19, of the specification.

The specification does not state alkaline catalysts are required or that acid catalysts cannot be used. Acid catalysts are said to pose some difficulties. These allegations are not evidence

Art Unit: 1712

anyway. Furthermore, Kemp's barium phosphate catalyst is never specifically discussed nor are the claims limited to alkaline catalysts.

Applicant argues Martinez uses commercial starting materials and therefore presumably has more impurities than claim 1 allows.

This does not address the obviousness of purifying old products. This does not address the fact that Kemp teaches pure methoxy PEG-OH can be made if the water content is kept low.

Applicant argues J '343 measures impurities through use of an ionic column and therefore does not recognize the impurities of claim 1.

The examiner relies on applicant's assurance that inherently this reference does not have the required purity. There is a common inventor between the reference and instant application. The examiner assumes applicant has brought to the examiner's attention all relevant information in the text of the document not apparent from the abstract.

Arguing J '343 does not inherently have the required purity does not address the obviousness of purifying old products or the obviousness of producing pure methoxy PEG-OH based on Kemp's teachings.

In summary, it appears applicant has merely taken elaborate steps to measure the purity of a previously known (or at least obvious) product by process.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1712

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is (703) -308-2403. The examiner can normally be reached on Monday through Fridays from 10 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson, can be reached on (703) -308-2340. The fax phone number for the organization where this application or proceeding is assigned is (703) -872-3910.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) -308-0661.

Buttner/LR **DAVID J. BUTTNER**
 PRIMARY EXAMINER

July 11, 2001

David Buttner